

IN THE CLAIMS:

Please amend Claims 1-7, as follows. Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

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1. (Currently Amended) An image forming apparatus comprising:

an electrophotographic photosensitive member;

a charging means for applying voltage to a charge member to charge ~~the~~ said electrophotographic photosensitive member;

a ~~static~~ electrostatic latent image forming means for forming ~~a static~~ an electrostatic latent image on the charged electrophotographic photosensitive member; and

a developing means for developing the electrostatic latent image,

wherein ~~the~~ said developing means is provided with at least a developer holding member having a developer holding member surface and ~~for holding~~ configured to hold a developer containing a toner on its developer holding member surface and a developer regulating member for regulating configured to regulate a layer thickness of a developer layer on ~~the~~ said developer holding member,

wherein the said electrophotographic photosensitive member and ~~the~~ said developer holding member are set opposite to each other to form a developing section,

wherein the said developer regulating member regulates the developer to form a thin layer of the developer on the developer holding member surface, and

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wherein in the said developing section, the toner in the developer is transferred to the electrostatic latent image held on the surface of the said electrophotographic photosensitive member to form a toner image,

wherein a the peripheral speed of the said electrophotographic photosensitive member is 150 mm/second or more,

wherein the toner has a weight-average particle diameter of from 5 to 12 μm , and of the toner having a circle-equivalent diameter of 3 μm or more, particles with a circularity a of 0.900 or more, found according to formula (1) are present at a rate of 90% or more in a number-based cumulative value, wherein

$$\text{circularity } a = L0/L \quad (1),$$

(wherein L0 denotes the circumference of a circle having the same projected area as a particle image, and L denotes the circumference of the particle image), ~~are present at a rate of 90% or more in a number-based cumulative value, and~~

wherein the toner satisfies the following conditions i) or ii):

i) a the relationship between a cut rate Z and a weight-average particle diameter X of the toner satisfies expression (2)

$$\text{cut rate } Z \leq 5.3 \times X \quad (2),$$

(wherein the cut ~~ratio~~ rate Z is represented by expression (3)

$$Z = (1 - B/A) \times 100 \quad (3),$$

where A represents a concentration, defined as (the number of particles/ μl), of all particles measured with a flow-type particle image analyzer FPIA-1000 manufactured by TOA MEDICAL ELECTRONICS CO., LTD., and B represents a concentration, defined as (the

number of particles/ μl), of the measured particles the circle-equivalent diameters of which are 3 μm or more), and

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wherein the a relationship between a number-based cumulative value Y of particles having a circularity of 0.950 or more and a weight-average particle diameter X of the toner satisfies expression (4):

$$Y \geq \exp 5.51 \times X^{-0.645} \quad (4),$$

(where X is in the range from 5.0 to 12.0 μm); and

ii) a the relationship between a cut ~~ratio~~ rate Z and a weight-average particle diameter satisfies expression (5)

$$\text{cut rate } Z > 5.3 \times X \quad (5)$$

and a the relationship between a number-based cumulative value Y of particles having a circularity of 0.950 or more and a weight-average particle diameter X satisfies expression (6)

$$Y \geq \exp 5.37 \times X^{-0.545} \quad (6),$$

(where X is in the range from 5.0 to 12.0 μm).

2. (Currently Amended) The image forming apparatus according to claim 1, wherein a the peripheral speed ratio of ~~the~~ said developer holding member to ~~the~~ said electrophotographic photosensitive member is 1.2 or less at ~~the~~ said developing section.

3. (Currently Amended) The image forming apparatus according to claim 1, wherein ~~the~~ said developer regulating member comprises an elastomeric member, and the free end of ~~the~~ said developer regulating member is brought into contact with ~~the~~ said developer holding member on.

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the upstream side of said image forming apparatus relative to ~~the~~ said developing section in the rotation direction of ~~the~~ said developer holding member, forming the thin layer of the developer on ~~the~~ said developer holding member surface.

4. (Currently Amended) A ~~process-cartridge~~ process cartridge comprising:
an electrophotographic photosensitive member; a
charging means for applying voltage to a charge member to charge ~~the~~ said
electrophotographic photosensitive member; and a
developing means for developing an electrostatic latent image,
wherein ~~the~~ said process cartridge is used for with an image forming apparatus in which a
toner in a developer is transferred to ~~an static~~ the electrostatic latent image to form a toner image,
and the toner image is transferred to a transfer material to form an image, and is so constructed
as to be detachably mountable on the apparatus,

wherein said ~~the~~ developing means is provided with at least a developer holding member
having a developer holding member surface and configured to hold ~~for holding~~ a developer
containing a toner on its developer holding member surface and a developer regulating member
~~for regulating~~ configured and positioned to regulate a layer thickness of a developer layer on the
developer holding member,

wherein said ~~the~~ electrophotographic photosensitive member and ~~the~~ said developer
holding member are set opposite to each other to form a developing section,

wherein ~~said~~ ~~the~~ developer regulating member regulates the developer to form a thin
layer of the developer on ~~the~~ said developer holding member surface, and

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wherein in ~~the~~ said developing section the toner in the developer is transferred to the electrostatic latent image held on the surface of the said electrophotographic photosensitive member to form a toner image,

wherein the a peripheral speed of ~~the~~ said electrophotographic photosensitive member is 150 mm/second or more,

wherein the toner has a weight-average particle diameter of from 5 to 12 μm , and of the toner having a circle-equivalent diameter of 3 μm or more, particles with a circularity a of 0.900 or more, found according to formula (1), are present at a rate of 90% or more in a number-based cumulative value, where

$$\text{circularity } a = L0/L \quad (1),$$

(wherein $L0$ denotes the circumference of a circle having the same projected area as a particle image, and L denotes the circumference of the particle image), ~~are present at a rate of 90% or more in a number-based cumulative value;~~ and

wherein the toner satisfies the following conditions i) or ii):

i) a the relationship between a cut rate Z and a weight-average particle diameter X of the toner satisfies expression (2)

$$\text{cut rate } Z \leq 5.3 \times X \quad (2),$$

(wherein the cut rate Z is represented by expression (3))

$$Z = (1 - B/A) \times 100 \quad (3),$$

where A represents a concentration, defined as (the number of particles/ μl), of all particles measured with a flow-type particle image analyzer FPIA-1000 manufactured by TOA MEDICAL ELECTRONICS CO., LTD., and B represents a concentration, defined as (the

number of particles/ μl), of the measured particles the circle-equivalent diameters of which are 3 μm or more), and

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a the relationship between a number-based cumulative value Y of particles having a circularity of 0.950 or more and a weight-average particle diameter X of the toner satisfies expression (4)

$$Y \geq \exp 5.51 \times X^{-0.645} \quad (4)$$

(where X is in the range from 5.0 to 12.0 μm); and

ii) a the relationship between a cut ~~ratio~~ rate Z and a weight-average particle diameter satisfies expression

$$\text{cut rate } Z > 5.3 \times X \quad (5)$$

and a the relationship between a number-based cumulative value Y of particles having a circularity of 0.950 or more and a weight-average particle diameter X satisfies expression (6)

$$Y \geq \exp 5.37 \times X^{-0.545} \quad (6)$$

(where X is in the range from 5.0 to 12.0 μm).

5. (Currently Amended) The ~~process-cartridge~~ process cartridge according to claim 4, which further has, and is combined as one unit with, at least one means selected from the group consisting of a ~~static~~ electrostatic latent image forming means for forming an electrostatic latent image on the charged electrophotographic photosensitive member, a means for transferring the toner image to a transfer material, and a cleaning means for cleaning the surface of ~~the said~~ electrophotographic photosensitive member after transfer.

6. (Currently Amended) The ~~process-cartridge~~ process cartridge according to claim 5,

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wherein a the peripheral speed ratio of the said developer holding member to the said electrophotographic photosensitive member is 1.2 or less at the said developing section.

7. (Currently Amended) The ~~process-cartridge~~ process cartridge according to claim 4,

wherein the said developer regulating member comprises an elastic member, and the free end of the said developer regulating member is brought into contact with the said developer holding member on the upstream side relative to the said developing section in the rotation direction of the said developer holding member, forming the thin layer of the developer on the said developer holding member surface.
